# **Final**

# PACIFIC GAS AND ELECTRIC COMPANY'S APPLICATION TO CONSTRUCT POTRERO TO HUNTERS POINT 115 kV CABLE PROJECT CPUC A.03-12-039

Mitigated Negative Declaration Response to Comments

November 19, 2004







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# Mitigated Negative Declaration Response to Comments

November 19, 2004

Prepared for California Public

**Utilities Commission** 

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# **EXECUTIVE SUMMARY**

# INTRODUCTION

The California Public Utilities Commission (CPUC) has prepared this Final Mitigated Negative Declaration (MND) to address the application from Pacific Gas and Electric Company (PG&E), (A.03-12-039) for a Permit to Construct (PTC) approximately 2.5 miles of underground 115 kilovolt (kV) single circuit cable between the Potrero and Hunters Point Switchyards. The intent of the proposed project, which PG&E proposed to begin construction activities on in 2005, is to increase the reliability of the electric transmission system service throughout the San Francisco Bay Area. This Final MND considered environmental impacts that would occur from the potential development and operation of the cable line and associated project components as proposed by PG&E. The analysis of this Final MND concluded that any environmental impacts associated with PG&E's proposed project can be mitigated to a less than significant level with implementation of mitigation measures identified in this document.

The CPUC completed a Draft MND for the PG&E Hunters to Potrero Cable Project (proposed project). The CPUC filed a Notice of Completion (NOC) with the Governor's Office of Planning and Research, State Clearing House, published a Notice of Availability (NOA) and released the Draft MND for a 30-day public review period on October 15, 2004. The Draft MND was distributed to a group of agency representatives and individuals as outlined in Table 3-1. Additionally, a Public Notice was published in the three general circulation newspapers announcing the availability of the document for public review in compliance with CEQA. The public review period and comment period on the Draft MND ended on November 15, 2004. Copies of all written comments received on the Draft MND are contained in this report.

As the lead CEQA agency, the CPUC prepared a response to all written comments received during the public review period for the Draft MND. The response to comments and text changes, together with the Draft MND, constitutes the Final MND upon certification by the CPUC as complete and adequate pursuant to CEQA.

### **Findings**

Therefore, based on the analysis conducted in the Final MND, the CPUC has found, on the basis of the whole record before it (including the initial study and public comments received), that there is no substantial evidence that the proposed project will have any significant unmitigable environmental impacts related to either construction activities or operations of the proposed project. The majority of the proposed project impacts result from construction activities. These impacts are temporary and can be mitigated to a less-than-significant level with mitigation

measures identified in this Final MND. An operational impact was also identified as a potential impact to public safety and operations of the proposed project. This operational impact was also determined mitigable; no significant unavoidable operational or temporary impacts would result. Accordingly, mitigation proposed as part of the proposed project, as well as measures identified in the Final MND, would avoid or reduce all of the impacts to a less-than-significant level.

Kevin Coughlan, Program Manager

Energy Division

California Public Utilities Commission

# **CHAPTER I**

# INTRODUCTION

# A. CEQA PROCESS

In September 15, 2004, the California Pubic Utilities Commission (CPUC) published the Final Initial Study on the proposed PG&E Potrero to Hunters Point 115kV Cable Project (A.03-12-039). Relying on the findings of the Initial Study, it was determined that the proposed project would not have a significant adverse effect on the environment; therefore, in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 21080, a Draft Mitigated Negative Declaration (MND) was prepared and released to the public. In accordance with Section 15105(b) CEQA Guidelines, the public review and comment period began on October 15, 2004 and ended on November 15, 2004.

This Final MND has been prepared pursuant to CEQA *Guidelines*<sup>1</sup> which outlines all aspects of the preparation of the Draft MND and its review, as well as the subsequent steps to preparing a Notice of Decision. This document incorporates comments from the Applicant and the general public, and contains responses by the Lead Agency to those comments. As a result of Applicant and public comment, changes have been made to the Draft MND. The sole intent of the Final MND and purpose is to provide corrections to certain facts set forth in the Draft MND to ensure accuracy. No new significant environmental impacts are created with revisions made to the Draft MND text. No mitigation measures presented in the Draft MND were deleted; however, modifications were made while retaining the intent of the mitigation measure.

The Final MND is an informational document prepared by the CPUC (lead agency) to be used by decision makers before approving or denying a proposed project.

The Final MND consists of the following:

- (a) A list of persons, organizations, and public agencies commenting on the Draft MND.
- (b) Comments and recommendations received on the Draft MND either verbatim or in summary.
- (c) Revisions to the Draft MND.
- (d) A Mitigation Monitoring, Compliance and Reporting Plan (MMCRP).

Title 14, California Code of Regulations, Chapter 3, Sections 15000 – 15387 and Appendices, accessible at http://ceres.ca.gov/topic/env\_law/ceqa/guidelines/

# **B. PUBLIC REVIEW PROCESS**

Public review is an integral part of the CEQA process.<sup>1</sup> Accordingly, in preparation of the Initial Study, an informational meeting was held on Thursday, July 22, 2004 at 6:00 pm in the Alex Pitcher Room of the Southeast Community Facility, located at *1800 Oakdale Avenue, San Francisco, California* to receive comments from the community about issues of concern. On July 7, 2004 the CPUC provided notice to relevant agencies, organizations and individuals residing in the proposed project area of PG&E's proposed Potrero to Hunters Point Cable Project. Information describing what groups and organizations contacted is provided in Chapter 3 of the MND.

On September 1, 2004, the CPUC mailed a second letter to relevant agencies, organizations and individuals residing in the proposed project area, announcing that the Draft Initial Study was available for public review. The notice also summarized key findings of the study. The CPUC established a comment telephone line (415-962-8467), e-mail address (potreroHPcable@esaassoc.com), and web site (www.potreroHPcable.com) to enable the public to ask questions, provide comments, and obtain additional information on the proposed project and project alternatives discussed in the Draft Initial Study. The review lasted until September 10, 2004. These comments were considered and incorporated, as applicable, into the Final Initial Study.

Relying on the findings of the Final Initial Study, it was determined that the proposed project would not have a significant adverse effect on the environment; therefore, in accordance with CEQA Guidelines Section 21080, a Draft MND was prepared. The Notice of Availability, stating that the Draft MND was available for public review, was mailed on October 13, 2004 to relevant agencies, organizations and individuals residing in the proposed project area. The mailing list for this notice was modified to include property owners on Tennessee Street that would be adjacent to the proposed project, which was revised in response to a comment received on the Initial Study.

In accordance with Section 15105(b) CEQA Guidelines, the public review and comment period for the Draft MND began on October 15, 2004 and ended on November 15, 2004. In response to the publication of the Draft MND for public review, applicant and public comments have been received. These comments are discussed in this document and are available for public review at the CPUC located on 505 Van Ness, 4th Floor, San Francisco, CA 94102-3298; contact John Boccio (415)703-2641.

# C. AGENCIES COMMENTING ON THE DRAFT MND

The CPUC (lead agency) submitted editorial comments to the draft MND during the public comment period. The comments were received on various dates. No other agencies submitted comments on the Draft MND during the public review period.

# D. ORGANIZATIONS COMMENTING ON THE DRAFT MND

No organizations submitted comments on the Draft MND during the public review period

# E. INDIVIDUALS COMMENTING ON THE DRAFT MND

The following individual submitted written comments on the Draft MND during the public review period (the date of the letter is also presented).

John Carney

November 12, 2004

# F. APPLICANT'S COMMENTS ON THE DRAFT MND

Best, Best & Kreiger, LLP, a representative of the Applicant (PG&E), submitted written comments on the Draft MND during the public review period (the date of the letter is also presented).

Best, Best & Kreiger, LLP

November 8, 2004

# G. LETTERS OF SUPPORT RECEIVED

The following individual submitted written comments supporting the proposed project during the public review period (the date of the letter is also presented). Each of these comments expressed support for the proposed project and did not state specific concern or question about the adequacy of the DMND so no specific response is necessary.

Catherine Doyle

November 16, 2004

# **CHAPTER II**

# COMMENTS ON THE DRAFT MND AND RESPONSES TO COMMENTS

# A. INTRODUCTION

This chapter includes copies of the comment letters received during the public review period on the Draft MND and responses to those comments. Both the comments and responses are part of the Final MND. Each comment is labeled with a number in the margin and the response to each comment is presented immediately after the comment letter.

Where responses have resulted in changes to the text of the Draft MND, these changes are shown within quoted portions of the Draft MND text using the following conventions:

- 1) Text added to the wording in the Draft MND is shown in <u>underline</u>,
- 2) Text deleted from the wording in the Draft MND is shown in strikeout, and
- 3) Text changes are shown in indented paragraphs.

These text changes also appear in Chapter III of this Response to Comments document.

# B. AGENCIES COMMENTING ON THE DRAFT MND

The CPUC (lead agency) submitted editorial comments providing clarification to the draft MND during the public comment period. The comments were received on various dates. No other agencies submitted comments on the Draft MND during the public review period.

# C. ORGANIZATIONS COMMENTING ON THE DRAFT MND

No organizations submitted comments on the Draft MND during the public review period.

# D. INDIVIDUALS COMMENTING ON THE DRAFT MND

The following individual submitted written comments on the Draft MND during the public review period (the date of the letter is also presented).

**D1** – John Carney

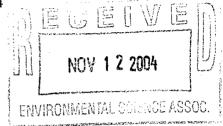
November 12, 2004

# JOHN C. CARNEY

RHODE ISLAND ST.
SAN FRANCISCO, CALF. 94107

PHONE # (415) 285-0365 NOVEMBER 8, 2004

Mr. John Boccio Environmental Project Manager California Public Utilities Commission 505 Van Ness Avenue San Francisco, Ca. 94105-3298



Subject: Potrero to Hunters Point 115 kV Cable Project. (A.03-12-039)

Dear John:

I have reviewed the draft report of October 15, 2004 (Mitigated Negative Declaration) on the above cable project and have the following comments:

This report does not take into account the fact that PG&E has two 115 kV cable project proposed for connection to the Hunters Point Substation. The projects are a new cable from Potrero Substation and a new cable from the Martin Substation. Computer studies show that these cables are required to handle overload conditions due to a cable failure when the Hunters Point Power Plant is not in operation. The installation of different cables may be a better solution for this overload problem. Like a system of a new cables from the Potrero Substation to the Mission Substation and from the Martin Substation to the Mission Substation and then shutting down the two existing lines from Hunter Point Substation to Mission Substation as these are where the overloads are taking place. It should be noted that the Hunter Point Substation will most likely have a low power distribution requirement if needed at all for power distribution.

Also the report does not discuss that most likely that to install the second cable to Hunters Point Substation a number of streets will have to be dug up a second time like Evans Ave. Note the people along Evans Ave are not happy about this construction project since they have just gone through the Third Street Rail Project. Note: PG&E has not provided the location of the Martin to Hunters Point route to us as of this time.

The EMF study is open to question for the following reasons: Does not take into affect of other high voltage cables that may be located in or near the proposed right of way. Also other pipeline and directions changes could affect the EMF level. (Pages 2.7-20) has maximum of 18.4 mG while page (2.7-23) has a value as high as 170 mG at the sidewalk. It appears that the cable is either may oversized (note 2, page 2.7-20) or the EMF values should be increased to those in the Final Initial Study (September 1, 2004) This system may operate at it's rated capacity for periods of time under other cable failure conditions.

No discussion of the location of other pipeline like high and low pressure gas, communication, water and sewer lines located in the same right of way as the new cable system. PG&E was not willing to provide this information to us.

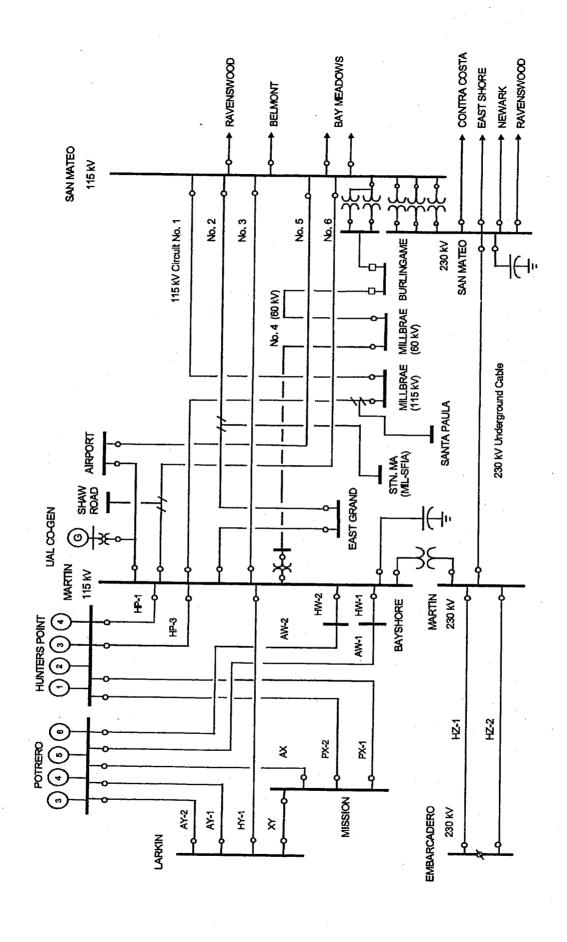
As stated above the need for this cable solution versus other solution should be investigated and discussed in this ireport.

Thanks for you staff help in providing information on this project.

Sincerely Yours

ohn C. Carney

San Francisco / Peninsula Corridor Transmission System Fig. 2



# LETTER D1 – JOHN CARNEY

D1-1 The comment is regarding the purpose and need of the project. The commenter is concerned that the draft MND does not take into account that PG&E has two 115kV cable projects, a new cable from Potrero Substation and a new cable from the Martin Substation, proposed for connection to the Hunters Point Substation. The comment states that the installation of different cables may be a better solution for this overload problem and notes that the Hunters Point Substation will most likely have a low power distribution if needed at all for power distribution.

Response to Comment: The response did not result in text changes; the following information is provided in response:

Using the CAISO California Grid Planning Criteria, PG&E transmission planners have evaluated various transmission alternatives capable of accomplishing the project objectives. According to this planning effort, constructing a new 115 kV underground cable from Potrero to Hunters Point is the most feasible and cost-effective means of better serving load and improving the reliability of PG&E's electrical system. The San Francisco Stakeholders Study Group, a broad-based, multidisciplinary study group led by the CAISO, has also studied these issues and has independently confirmed the need for the Potrero to Hunters Point 115 kV Cable Project. In December 2000, the CAISO formally approved this project.

As noted previously, the Potrero to Hunters Point 115 kV Cable Project will also provide one component needed to meet the goal of closing PG&E's Hunters Point Power Plant . In accordance with PG&E's agreement with the City and County of San Francisco, PG&E will close Hunters Point Power Plant as soon as 1) it is no longer needed to sustain electric reliability in San Francisco and surrounding areas, and 2) the CAISO authorizes closure of the plant.

The two electric transmission projects considered by PG&E for connection to the Hunters Point Switchyard are the Potrero to Hunters Point 115 kV Cable Project for which PG&E is seeking authorization to construct from the CPUC in application (A.03-12-039) and another project known as the Martin to Hunters Point 115 kV Single Circuit 115 kV Project which is in the planning stages. The Potrero to Hunters Point Project is needed to address more immediate load-serving capability needs in San Francisco and is an element that is needed to allow the closure of the Hunters Point Power Plant. The Martin to Hunters Point Project is needed to address future load-serving capability needs in San Francisco, assuming that the Potrero to Hunters Point Project is already operational. The addition of the Martin to Hunters Point cable increases load-serving capability in San Francisco more than the addition of the two cables (Potrero-Mission and Martin-Mission) mentioned in Mr. Carney's letter. Again, these power flow studies have been reviewed by the San Francisco Stakeholders Study Group, which concurred with the conclusion of the studies.

Building new lines from Potrero Substation to Mission Substation and Martin Substation to Mission Substation and shutting down two existing lines between the Hunters Point Switchyard and Mission Substation as suggested, would not serve as an alternative to PG&E's proposed Potrero to Hunters Point Project. Such a plan would remove needed circuits from the system serving San Francisco since the Hunters Point Switchyard is a vital part of the system.

D1-2 The comment states that the MND does not discuss PG&E's Martin to Hunter's Point cable project, which is potentially planned for Hunters Point Substation. The commenter states that the Martin to Hunter's Point project will result in a number of streets having to be dug up a second time, like Evans Avenue. The comment notes that people along Evans Avenue are not happy about this construction project since they have just gone through the Third Street Rail project. The comment also expresses concerns that PG&E has not provided the location of the Martin to Hunters Point route to us at this time.

Response to Comment: The response did not result in text changes; the following information is provided in response:

The Martin to Hunter's Point was listed as a cumulative project on Table 2.17-2, page 2.17-10. The Martin to Hunter's Point project is still in the preliminary planning stages, and as a result the cable location and dimensions are currently under evaluation. Though a route has not been finalized, it is known that Evans Avenue is common to both projects between Newhall Street and the Hunters Point Switchyard. As a result, construction will be required along a short portion of Evans Avenue. The dimensions or footage required is currently under evaluation. Evan's Avenue is the only street that is common to the both projects and the footage required for Martin to Hunter's Point along Evan's Avenue is currently under evaluation.

D1-3 The comment is as follows: "The EMF study is open to question for the following reasons: Does not take into affect of other high voltage cables that may be located in or near the proposed right of way. Also other pipeline and directions changes could effect the EMF level (pages 2.7-20) has maximum of 18.4 mG while page (2.7-23) has a value as high as 170 mG at the sidewalk. It appears that the cable is either oversized (note 2, page 2.7-20) or the EMF values should be increased to those in the Final Initial Study (September 1, 2004). This system may operate at its rated capacity for periods of tine under other cable failure conditions".

Response to Comment: The value of 170 mG for EMF was reported in error. This has been corrected in the final MND, as indicated in Section III of this Response to Comment document. The following text has been removed:

Page However, where the cable is perpendicular to and beneath the sidewalk the local exposure to pedestrians may be as high as 170 mG.

*The correct EMF values are reported on page 2.7.5 as follows:* 

For the proposed single-circuit cable line, the calculated magnetic field strength varies from a maximum of 18.4 mG at the centerline and 2.4 mG at 20 feet from the centerline<sup>1</sup>. The exposure<sup>2</sup> to the driving public therefore would vary from 18.4 mG to 2.4 mG or less depending on distance to the cable. On sidewalks, the pedestrian exposure typically would be 2.4 mG or less, as long as the cable is 20 feet from the edge of the sidewalk. However, where the cable is perpendicular to and beneath the sidewalk the local exposure to pedestrians may be as high as 18.4 mG.

*The following response is provided for additional clarification:* 

In addition, the draft Initial Study reporting the calculated magnetic field strength of approximately 170 mG directly above the cables was in error as the line will not be capable of reaching such levels. First, the calculations were incorrectly based upon the largest cable that could fit in a 6" duct – 3500 kcmil copper – which is not the standard cable size for this project. Second, the calculations were based upon a maximum load of 275 MVA, which is well above the expected rating for the line (approximately 200 MVA) and could not be attained in any event because other system constraints would limit the load level.

The calculated magnetic field levels of 18.4 mG directly over the cables and 2.4 mG at a distance of 20 feet is based on the proposed line and do not include any existing or future other sources of magnetic field. Other existing magnetic field sources may be higher that the proposed transmission line. The purpose of the calculations is to estimate magnetic field levels for peak loading of the new line without influence of other sources.

Lastly, the CPUC Decision 93-11-013 issued on November 2, 1993 to address public concern about possible EMF health effects from electric utility facilities concluded the following:

"We find that the body of scientific evidence continues to evolve. However, it is recognized that public concern and scientific uncertainty remain regarding the potential health effects of EMF exposure. We do not find it appropriate to adopt any specific numerical standard in association with EMF until we have a firm scientific basis for adopting any particular value."

PG&E follows the "EMF Design Guidelines," prepared in accordance with the CPUC's EMF decision and directives. Those Guidelines recommend using worst-case estimated Normal Peak Load for magnetic field strength calculations to determine the effectiveness of proposed mitigation options. This calculation gives the highest realistic strength value that will occur for the expected energy usage under peak operating conditions, which for

Best Best and Krieger LLP, 2004. Memorandum providing comment on the Draft Initial Study Potrero to Hunters Point 115 kV Cable Project, Application A-03-12-039. September 10, 2004.

Because the cable line would not ever be able to reach its full operating capacity, these estimated levels of EMF comprise a worst-case EMF scenario.

the Potrero to Hunters Point Cable Project are expected to occur only a few hours each year. As the revised information indicates, these calculations show a Normal Peak Load magnetic field level of 18.4 mG directly above the line, diminishing quickly to 7 mG at 10 feet from the line and 2.4 mG at 20 feet from the line.

**D1-4** The commenter is concerned as there is not a discussion of the locations of other pipelines; such as high and low pressure gas, communication, water, and sewer lines located in the same right of way as the new cable system. In addition, the commenter states that PG&E is not willing to provide this information.

Response to Comment: The response did not result in text changes; the following information is provided in response:

PG&E does not publish information related to the precise location of utility infrastructure for security reasons. This information is available for viewing by contacting the California Public Utility Commission, 505 Van Ness Avenue, San Francisco, California 94102; contact John Boccio at (415) 703-2641. This information is not available for duplication by the public.

Also, as part of the planning approval process, PG&E will submit a detailed utility constraints map to the City of San Francisco Public Works Commission for approval. The agency will review the proposed cable location to assure that no utility constraints exist, and, if applicable, issue an Excavation Permit to PG&E prior to implementation of construction.

# E. APPLICANT'S COMMENTS ON THE DRAFT MND

E1 – Best, Best & Krieger, LLP

November 8, 2004

# **BEST BEST & KRIEGER LLP**

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November 8, 2004

# Via Electronic and Regular Mail

Diana Lee Attorney, Legal Division California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

Re: Potrero to Hunters Point 115 kV Cable Project, Application A-03-12-039

Dear Ms. Lee:

Thank you for the opportunity to provide these comments to the draft Mitigated Negative Declaration (MND) on behalf of Pacific Gas and Electric Company.

First, the Environmental Checklist at pp. 2.15-6-2.15-7 contains a suggestion that excavated materials from the project will be stored "near each of the switchyards." In fact, as we have previously indicated, PG&E does not plan to store any excavated materials at the Hunter's Point Switchyard. All excavated materials will be temporarily stored near the Potrero Switchyard. Construction staging areas will be located near each switchyard.

At page 1-24, the first proposed mitigation measure, we recommend adding "or as needed" after "water twice daily," since a light rain would alleviate the need for watering or too much watering could result in undesired runoff water.

At page 1-25, the last proposed mitigation measure providing that "Removal of any asbestos containing materials shall be performed by a CAL-OSHA certified, licensed asbestos abatement contractor" does not apply where there is less than one percent of asbestos present in the rock or in cases where a "negative exposure assessment" (as described in California Code of Regulations, Title 8, Section 1529(f)(2)(C)) can be performed. We recommend that the measure be revised to say: "Removal of any asbestos containing materials *shall be performed in accordance with California Code of Regulations, Title 8, Section 1529.*" The same language should be revised in Section 2.3, Air Quality, pages 6 and 14.

At page 1-25, the proposed mitigation measure that begins "Construction projects that will disturb more than one acre of asbestos containing material" should define "asbestos containing material" in accordance with California Code of Regulations, Title 17, Section 93000.

# LAW OFFICES OF BEST BEST & KRIEGER

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Furthermore, there are also requirements governing projects disturbing less than one acre of asbestos containing material. We recommend that the measure be revised to read: "Construction projects that will disturb "asbestos containing material" as defined by California Code of Regulations, Title 17, Section 93000 shall comply with all applicable BAAQMD regulatory requirements."

At page 1-26, we recommend that the proposed mitigation measure that reads "All handling and disposal of toxic materials shall be performed by a certified solid waste facility" be revised to: "All handling and disposal of hazardous materials and wastes shall be done in compliance with applicable regulatory requirements including, but not limited to, those administered by U.S. EPA, BAAQMD, Department of Toxic Substances Control (DTSC), SF Bay Regional Water Quality Control Board, and Cal OSHA." This change broadens the scope of the measure to include hazardous materials and wastes exhibiting other characteristics in addition to "toxicity." It also covers all aspects of handling and disposal in addition to those performed by the certified solid waste facility, and removes the suggestion that a certified solid waste facility would handle toxic materials at the project site.

At page 1-38, Mitigation Measure HYD-1 would appear to preclude the use of native back fill, which is discussed elsewhere as a possibility. It should be revised to specify that it applies only when concrete is used.

At page 2.17-4, the last paragraph should be revised to reflect the fact that the San Mateo-Martin #4 60 kV Conversion Project was energized in July 2004.

We have separately provided comments that, in line with recent CPUC precedent, EMF issues should not be addressed as a CEQA issue but instead are properly addressed outside of the CEQA context. The draft MND confirms this approach, but is somewhat inconsistent.

If you need further information or explanation on these comments, feel free to contact me. Thank you again for the opportunity to provide comments.

Sincerely,

Jo Lynn Lambert for BEST BEST & KRIEGER LLP

Attorneys for Pacific Gas and Electric Company

JLL:1ch

cc: David T. Kraska, PG&E Law Department
John Boccio, Project Manager, CPUC Energy Division (via electronic mail)
Cynthia Wren, ESA (via electronic mail)

# LETTER E1 – BEST, BEST & KRIEGER, LLP

E1-1 PG&E's attorney suggested a correction to the Environmental Checklist on pp. 2.15-6 – 2.15-7, which states that excavated materials from the project will be stored "near each of the switchyards." The comment confirmed that PG&E does not plan to store any excavated materials at the Hunter's Point Switchyard. All excavated materials will be temporarily stored near the Potrero Switchyard. Construction staging areas will be located near each switchyard.

Response to Comment: This information been corrected in the final MND as indicated in Section III of this Response to Comment document. The following has been revised:

### Pages

2.15-6 -

**2.15-7** *In the Traffic section, the last sentence on the page has been revised:* 

Excavated materials and equipment storage yards would be temporarily stored at PG&E property located north of located near each of the switchyardsthe Potrero Switchyard, while equipment storage/staging areas would be located near each switchyard. Each of the following roadways are paralleled by the proposed project route and may experience lane closures during construction of the project:

**E1-2** The commenter suggests making a revision on page 1-24, the first proposed mitigation measure, and recommend adding "or as needed" after "water twice daily," since a light rain would alleviate the need for watering or too much watering could result in undesired runoff water.

Response to Comment: Comment noted. The following is provided in response:

The requirement for watering construction areas, unpaved access roads, and staging areas at least twice daily during dry weather, which also provides for applying soil stabilizers during active work, is required by the Bay Area Air Quality Management District.<sup>3</sup>

E1-3 The commenter recommends a change on page 1-25, to the last proposed mitigation measure, "Removal of any asbestos containing materials shall be performed by a CAL-OSHA certified, licensed asbestos abatement contractor" since the requirement does not apply where there is less than one percent of asbestos present in the rock or in cases where a "negative exposure assessment" (as described in California Code of Regulations, Title 8, Section 1529(f)(2)(C)) can be performed. The following measure is recommended: "Removal of any asbestos containing materials *shall be performed in accordance with California Code of Regulations, Title 8, Section 1529.*"

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<sup>&</sup>lt;sup>3</sup> This BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans. April 1996, revised December 1999.

Response to Comment: This information been corrected in the final MND, as indicated in Section III of this Response to Comment document. The following has been revised:

# **Page**

- **1.25** In Table 1-2, the Air Quality Mitigation Measure AQ-2 has been revised as follows:
  - Removal of any asbestos containing materials shall be performed by a CAL-OSHA certified, licensed asbestos abatement contractor in accordance with California Code of Regulations, Title 8, Section 1529.
- E1-4 The commenter suggests a change on page 1-25 for the proposed mitigation measure that begins "Construction projects that will disturb more than one acre of asbestos containing material" to define "asbestos containing material" in accordance with California Code of Regulations, Title 17, Section 93000. The commenter also suggests that a measure be included to read: "Construction projects that will disturb "asbestos containing material" as defined by California Code of Regulations, Title 17, Section 93000 shall comply with all applicable BAAQMD regulatory requirements."

Response to Comment: This following information been added in the final MND, as indicated in Section III of this Response to Comment document.

### Page

- **1.25** *In Table 1-2, the following Mitigation Measure has been added:* 
  - Construction project that will disturb less than one acre of asbestos containing material, as defined by California Code of Regulation, Title 17, Section 93000, shall comply with all applicable BAAQMD regulatory requirements
- E1-5 The commenter recommends adding, to page 1-26, a proposed mitigation measure that reads "All handling and disposal of toxic materials shall be performed by a certified solid waste facility" be revised to: "All handling and disposal of hazardous materials and wastes shall be done in compliance with applicable regulatory requirements including, but not limited to, those administered by U.S. EPA, BAAQMD, Department of Toxic Substances Control (DTSC), SF Bay Regional Water Quality Control Board, and Cal OSHA."

Response to Comment: This information been included revised in the final MND, as indicated in Section III of this Response to Comment document. The following has been revised:

### **Page**

- **1.26** In Table 1-2, the Air Quality Mitigation Measure AQ-2 has been revised as follows:
  - All handling and disposal of toxie-hazardous materials and waste shall be done in compliance with applicable regulatory requirements including, but not limited to, those administered by U.S. EPA, BAAQMD, Department of Toxic Substances Control (DTSC), San Francisco RWQCB, and Cal-OSHA. performed by a certified solid waste facility.

**E1-6** The Mitigation Measure HYD-1 on Page 1-38 appears to preclude the use of native back fill, which is discussed elsewhere as a possibility. It should be revised to specify that it applies only when concrete is used.

Response to Comment: This information been corrected in the final MND, as indicated in Section III of this Response to Comment document. The following has been revised:

### **Page**

- 1.38 Once the duct bank is installed, it shall be surrounded with concrete. Above the duct bank, the trench shall be filled with fluidized thermal backfill (a blend of sand, gravel, fly ash, and cement) and/or approved native backfill
- E1-7 At page 2.17-4, the last paragraph should be revised to reflect the fact that the San Mateo-Martin #4 60 kV Conversion Project was energized in July 2004.

Response to Comment: This information been corrected in the final MND, as indicated in Section III of this Response to Comment document. The following has been revised:

# **Page**

**2.17-4** In the Mandatory Findings of Significance, the 3<sup>rd</sup> paragraph, has been revised:

There are two planned transmission projects that can help alleviate San Francisco's meet growth demand and capacity shortage issues. A planned upgrade to the San Mateo-Martin #4 60 kV to 115kV line, which currently serves San Francisco and was energized in July 2004, is scheduled for 2004 and is expected to bring as much as 100 megawatts (MW) of new capacity.

**E1-8** The commenter suggests that EMF issues should not be addressed as a CEQA issue but instead are properly addressed outside of the CEQA context. The draft MND confirms this approach, but is somewhat inconsistent.

Response to Comment: Information been added to the final MND, as indicated in Section III of this Response to Comment document. The following has been added:

## Page

**2.7-4** In the Hazard Section, the following information has been added as the last paragraph on the bottom of the page.

Other specific EMF reduction measures may be imposed by the CPUC after its "unprecedented precautionary measures" taken in Final Decision 39112-15 for the Jefferson-Martin 230 kV project. On August 19, 2004, the Commission, in its Final Decision required several changes to PG&E's preliminary EMF management plan for the proposed project. These changes included: adopting a single 4 percent EMF mitigation benchmark for the entire project, lowering the depth of the underground lines to 11 feet deep in all residential areas and by schools, daycare centers, senior centers, parks, and similar public places. Additional unprecedented precautionary measures imposed by the

Commission include arranging conductors in a triangular configuration to reduce EMF levels, as well as strategic line placement along the entire route to reduce EMF exposure.

# <u>Page</u>

**2.7-5** *In the Hazard Section, the following information has been added as paragraph 3 and 4.* 

Other specific EMF reduction measures may be imposed by the CPUC after its "unprecedented precautionary measures" taken in Final Decision 39112-15 for the Jefferson-Martin 230 kV project. On August 19, 2004, the Commission, in its Final Decision required several changes to PG&E's preliminary EMF management plan for the proposed project. These changes included: adopting a single 4 percent EMF mitigation benchmark for the entire project, lowering the depth of the underground lines to 11 feet deep in all residential areas and by schools, daycare centers, senior centers, parks, and similar public places. Additional unprecedented precautionary measures imposed by the Commission include arranging conductors in a triangular configuration to reduce EMF levels, as well as strategic line placement along the entire route to reduce EMF exposure.

However, the CPUC, on July 30, 2004, filed an Order Instituting Rulemaking that will focus on the determining "if there are improvements that should be made to the Commission's existing rules and regulations concerning electromagnetic fields (EMFs) associated with electric transmission lines or other utility electric facilities" noting that the Commission's interim policy has not been updated in over ten years.

# F. LETTERS OF SUPPORT RECEIVED

The following individual submitted written comments supporting the proposed project during the public review period (the date of the letter is also presented). Each of these comments expressed support for the proposed project and did not state specific concern or question about the adequacy of the Draft MND so no specific response is necessary.

F-1 –Catherine Doyle

November 16, 2004

# Catherine T. Doyle 1415 Indiana Street, Unit #106 San Francisco, California 94107

Via Fax: 1-415-896-0332 No Confirmation to Follow

November 16, 2004

Mr. John Boccio Regulatory Analyst, California Public Utilities Commission Potrero to Hunters Point Cable c/o ESA 225 Bush Street, Suite 1700 San Francisco, California 94104

Dear Mr. Boccio:

I have reviewed the Mitigated Negative Declaration dated October 15, 2004 for PG&E's Application to Construct Potrero to Hunter's Point 115 kV Cable Project (CPUC A.03-12-039). I want to thank you so very much for listening to our concerns and implementing a new alternate route (continuing south on Tennessee - between 25th and Cesar Chavez) for the proposed project. Thank you for allowing us a voice in our community.

Catherine T. Doyle

1415 Indiana Street Owner

(415) 586-5589

cc: Indiana Street Homeowners Association Sophie Maxwell, San Francisco Supervisor for District 10 (via fax 554-7674)

# LETTER F1 – CATHERINE DOYLE

**F1-1** The commenter provided written notice of support for the proposed project.

Response to Comment: Comment noted.

# **CHAPTER III**

# TEXT CHANGES TO THE DRAFT MND

The following text changes are made to the Draft Mitigated Negative Declaration (MND). The changes are shown by page number in the Draft MND and identified as to the location of the change in the body of the text or table.

Where changes are shown inserted in the existing Draft MND text, revised or new language is <u>underlined</u>, deleted language is indicated by <del>strike through</del>, and the original text is shown without underline or strike through.

Where not ambiguous, new or replacement text is shown without markings. If the text change is a result of a comment letter received during the public review period on the Draft MND, it is indicated with the text change item. These text changes also appear in Chapter II of this Response to Comments document. If the text change is editorial or a result of document clarification, and not official comment, text changes are shown only.

# Page Identification / Text Change:

# 1.4 The first complete paragraph has been revised as follows:

The San Francisco Stakeholders Group evaluated a variety of potential solutions to address these deficiencies. Their evaluation focused on generation and transmission, dismissing load reduction as an effective long-term solution due to the magnitude of load reduction that would be required to address the deficiencies in the system. Although the San Francisco Stakeholders Group did not evaluate specific generation projects, they did note the need for an additional 400 MW or more of new generation to meet projected power needs for 2009. —were not evaluated in the study, the San Francisco Public Utilities Commission included generation additions to PG&E's system as a long term initiative to meet growing power needs and to increase reliability (SFPUC, 2002) which include the City and County of San Francisco's plans to install three 48 MW LM6000 combustion turbines at the Potrero Substation and one at the San Francisco International Airport.—The preferred transmission project was determined to be the Jefferson-Martin 230 kV line, which would bring power to the city, in combination with the internal transmission network reinforcement including construction of a 115 kV underground cable between Potrero and Hunters Point to provide reliability within the city. In December 2000, CAISO formally approved the PG&E's Potrero to Hunters Point 115 kV Cable Project.

The CAISO reiterated its belief that the proposed project was necessary in its April 18, 2003 letter from Terry Winters to Kevin Dasso of PG&E and San Francisco City Attorney Therese Mueller, and its July 4, 2004 letter from Jim Delmers to San Francisco Mayor Gavin Newsom, et. al.

Focusing on these generation needs, the San Francisco Public Utilities Commission, included additions to PG&E's system as a long-term initiative to meet growing power needs and to increase reliability (SFPUC, 2002) which include the City and County of San Francisco's plans to install three 48 MW LM6000 combustion turbines at the Potrero Power Plant and one at the San Francisco International Airport.

- 1.7 The last sentence of the  $1^{st}$  bulleted item has been revised as follows:
- Excavated Materials Storage and Staging Areas. Across the street from the Potrero Switchyard on the northeast corner of Illinois Street and 22nd Street, PG&E's general construction yard provides storage for vehicles and other types of equipment. This yard would be used as a staging area and storage site for materials removed, as well as those used (i.e. concrete, plastic conduit, and asphalt) during the construction phase. This yard is primarily cleared and graded with gravel. If an alternative storage and/or staging area is chosen for use during construction, the site would be surveyed by a biologist prior to construction to verify that no sensitive resources are present.
- 1.7 Section 1.4, last portion of the 1<sup>st</sup> paragraph has been revised as follows:

Currently, a Static Volt-Ampere-Reactive (VAR) Compensator is being constructed, with operation scheduled for December 20052004, at the Potrero Substation to replace the Hunters Point Unit #2 and #3 synchronous condensers. The Static VAR Compensator will allow continuous control of power swings under various system conditions, since the transmitted load varies considerably from one hour to another. Due to their long years of service, these plants have recently begun to exhibit an increased trend of unreliability, with more forced outages, longer duration outages, and maintenance needs increasing in cost and scope. These power plants are also facing additional limitations and/or maintenance costs due to increasingly restrictive air quality regulations.—system conditions, since the transmitted load varies considerably from one hour to another. Due to their long years of service, these plants have recently begun to exhibit an increased trend of unreliability, with more forced outages, longer duration outages, and maintenance needs increasing in cost and scope. These power plants are also facing additional limitations and/or maintenance costs due to increasingly restrictive air quality regulations.

**1.15** Last sentence in Section 1.8, Step 1 – Trenching/Duct Bank Installation has been revised as follows:

Prior to trenching, PG&E would notify other utility companies (via the Underground Service Alert) to locate and mark existing underground structures along the proposed cable line route, and also would conduct exploratory excavations (potholing) to approve the locations for proposed facilities. PG&E would apply for an excavation permit from the city for trenching in City streets. No roads would be completely closed, although one-way traffic controls would be implemented. PG&E would also coordinate with the Port of San Francisco for the section of Illinois Street, 23rd

Street, Tennessee Street and Evans Avenue within which the Port retains an underlying fee interest.—that falls within their jurisdiction between 22nd and 23rd Streets.

**1.16** The last portion of the  $4^{th}$  paragraph has been revised as follows:

Fiber optic lines that PG&E asserts would be for system protection and communication would be housed in two 4-inch-diameter conduits that would be installed above the top level of the 6-inch-diameter conduits or along side of the 6-inch-diameter conduits depending on the trench configuration and within the thermal backfill. The three electrical cables that make up one circuit would be capable of carrying 200 MVA at the normal conductor temperature rating of 90 degrees centigrade. The 200 MVA load on this circuit would be met using copper conductor extruded dielectric cable.

**1.17** *The last paragraph on the page has been removed:* 

# Step 3 - Cable Pulling, Splicing and Termination

After installation of the conduit, PG&E would install cables in the duct banks. Each cable segment would be pulled into the duct bank, spliced at each of the vaults along the route, and terminated at the switchyards. The three electric cables and one communication cable would be pulled through individual ducts at the rate of two of the three segments between vaults per day. To pull the cable through the duct bank, a cable reel is placed at the end of a section and a pulling

**1.23** *The*  $3^{rd}$  *paragraph has been revised on:* 

At the Potrero Switchyard, the bus connection would be attached to an existing bay (Bay <u>1817</u>). The transition structure and breaker would be installed within the switchyard toward the southeastern side of the station behind Bay <u>1817</u>.

1.25-1.26 As indicated in Chapter II and in response to comment E1-3,E1-4 and E1-5 (Best, Best and Krieger, LLP) a revision was made in Table 1-2. The Air Quality Mitigation Measure AQ-2 has been revised as follows:

*The following Mitigation Measure was added:* 

 Construction project that will disturb less than one acre of asbestos containing material, as defined by California Code of Regulation, Title 17, Section 93000, shall comply with all applicable BAAQMD regulatory requirements

The  $4^{th}$ ,  $5^{th}$ , and  $7^{th}$  Mitigation Measures for **A0-2** now read:

- Construction projects that will disturb more than one acre of asbestos containing material, as
   <u>defined by</u> the California Code of Regulations, Title 17, Section 93000, shall prepare and obtain
   <u>BAAQMD district</u> approval for an asbestos dust mitigation plan. The plan shall specify how the
   operation will minimize emissions and must address specific emission sources.
- Removal of any asbestos containing materials shall be performed by a CAL-OSHA certified, licensed asbestos abatement contractor in accordance with California Code of Regulations, Title 8, Section 1529.

All handling and disposal of toxie-hazardous materials and waste shall be done in compliance with applicable regulatory requirements including, but not limited to, those administered by U.S. EPA, BAAQMD, Department of Toxic Substances Control (DTSC), San Francisco RWQCB, and Cal-OSHA.—performed by a certified solid waste facility.

*In addition, the following Mitigation Measure in AQ-1 was revised:* 

- Additionally, Mitigation Measure <u>HAZ-1b and</u> LUP-1 shall be implemented to minimize impacts to sensitive receptors.
- 1.39 In Table 1-2, the following Noise Mitigation Measure NOI -2 has been moved from the vibration measure and inserted as a Noise Mitigation Measure NOI -1:
  - Pavement breakers and jack hammerers shall be equipped with acoustically attenuated shields or shrouds recommended by the manufacturers.
- 1.39 In Table 1-2, the following Noise Mitigation Measure NOI -2 has been changed to read as follows:
- **NOI-2:** PG&E shall ensure that the following construction vibration mitigation measures are implemented. When in close proximity to sensitive receptors, vibratory drivers, instead of conventional pile drivers, shall be used where feasible and effective in reducing noise and vibration impacts noise from shoring of jack-pit and thrust-block excavations.
- 1.40 In Table 1-2, the following Public Service Mitigation Measure PS -2b has been changed to read as follows

**PS-2b:** Park facilities, including the Bay Trail along Illinois Street between 22nd and 23rd Streets shall not be closed and/or restricted for a period of time exceeding two consecutive months weeks, unless there are extenuating circumstances.

**2.2-2** *In Aesthetics Section, a portion of*  $3^{rd}$  *paragraph has been changed to read as follows:* 

This is one of the few residential buildings along the proposed project route. <u>Mitigation</u>

<u>Measure LUP-1</u>, provided in Section 2.9 *Land Use*, <u>Mitigation</u> has been proposed to move the proposed project route from Minnesota Street between 25th Street and Cesar Chavez in order to eliminate any project-related impacts to the residents. The proposed route continues west on Cesar Chavez for several blocks, passing an apartment building at Indiana Street. Caltrain and the <u>Southern Union</u> Pacific rail corridors traverse Cesar Chavez Street, as do two elevated regional freeways, Interstate 280 (I-280) and Highway 101.

2.2-9 In the Aesthetics section, the 1<sup>st</sup> sentence in Consistency with Adopted Plans and Policies section has been changed to read as follows:

The proposed project would not conflict with the City of San Francisco General Plan Recreation and open Space Element, San Francisco General Plan Urban Design Element, and Central Waterfront Area Plan, or South Bayshore Areas Plan policies on visual quality because it would not affect views of the water or shoreline.

**2.3-6** In the Air Quality Section, the first sentence of the last paragraph has been changed to read as follows:

An exemption can be granted be BAAQMD if a geological evaluation demonstrates that ultramafic or serpentine rock is not likely to be found. Removal of any asbestos containing materials must be performed in accordance with the California Code of Regulations, Title 8, Section 1529. by a CAL-OSHA certified, licensed asbestos abatement contractor.

**2.3-7** In the Air Quality Section, the following sentence has been added to the first complete paragraph (Sensitive Receptors):

The closest sensitive receptor identified is the residential development on 25th Street, Minnesota Street, and Cesar Chavez Street. <u>Mitigation Measure LUP-1</u>, provided in Section 2.9 <u>Land Use</u>, has been proposed to move the proposed project route from Minnesota Street between 25th Street and Cesar Chavez in order to eliminate any project-related impacts to the residents.

- **2.3.-3** *In the Air Quality section, the following Mitigation Measure AQ-2 has been added:* 
  - Construction projects that will disturb less than one acre of asbestos
    containing material, as defined by the California Code of Regulations, Title
    17, Section 93000, shall comply with all applicable BAAQMD regulatory
    requirements.
- **2.3-14** In the Air Quality section, the following Mitigation Measures AO-2 have been revised:
  - Construction projects that will disturb more than one acre of asbestos containing material, as defined under California Code of Regulations, Title 17, Section 93000, shall prepare and obtain BAAQMD district approval for an asbestos dust mitigation plan. The plan shall specify how the operation will minimize emissions and must address specific emission sources.
  - Removal of any asbestos containing materials shall be performed in accordance with the California Code of Regulations, Title 8, Section 1529, which regulates the management and removal of asbestos containing materials. by a CAL-OSHA certified, licensed asbestos abatement contractor.
  - All handling and disposal of toxic hazardous materials and waste shall be done in compliance with applicable regulatory requirements including, but not limited to, those administered by U.S. EPA, BAAQMD, Department of Toxic Substances Control (DTSC), San Francisco RWQCB, and Cal-OSHAperformed by a certified solid waste facility.

**2.7-3** *In the Hazard Section, the following section heading has been revised:* 

# **Electric and Magnetic Field Hazard Concerns**

**2.7-4** As indicated in Chapter II and in response to comment and E1-8 (Best, Best and Krieger, LLP) the Hazard Section has been revised. The following information has been added:

Other specific EMF reduction measures may be imposed by the CPUC after its "unprecedented precautionary measures" taken in Final Decision 39112-15 for the Jefferson-Martin 230 kV project. On August 19, 2004, the Commission, in its Final Decision required several changes to PG&E's preliminary EMF management plan for the proposed project. These changes included: adopting a single 4 percent EMF mitigation benchmark for the entire project, lowering the depth of the underground lines to 11 feet deep in all residential areas and by schools, daycare centers, senior centers, parks, and similar public places. Additional unprecedented precautionary measures imposed by the Commission include arranging conductors in a triangular configuration to reduce EMF levels, as well as strategic line placement along the entire route to reduce EMF exposure.

However, the CPUC, on July 30, 2004, filed an Order Instituting Rulemaking that will focus on the determining "if there are improvements that should be made to the Commission's existing rules and regulations concerning electromagnetic fields (EMFs) associated with electric transmission lines or other utility electric facilities" noting that the Commission's interim policy has not been updated in over ten years.

**2.7-6** In the Hazard Section, the following information was moved from 2.7-20 and added as paragraph 3.

There is the potential for exposure of the public to EMF from the cable line. For the proposed project, most of the underground duct bank would be within roadways. For the proposed single-circuit cable line, the calculated magnetic field strength varies from a maximum of 18.4 mG at the centerline and 2.4 mG at 20 feet from the centerline (PG&E, 2004; Best Best and Kreiger, 2004). The exposure² to the driving public therefore would vary from 18.4 mG to 2.4 mG or less depending on distance to the cable. On sidewalks, the pedestrian exposure typically would be 2.4 mG or less, as long as the cable is 20 feet from the edge of the sidewalk. However, where the cable is perpendicular to and beneath the sidewalk the local exposure to pedestrians may be as high as 18.4 mG. This results in a greatly reduced width of exposure as compared to an overhead line. The underground cables would transition to above ground structures at the existing substations at each end of the project route. The field strength of the above ground conductors at the substation fence line has not been provided. In addition, the existing EMF levels induced by other utilities in the project vicinity are not known.

Because the cable line would not ever be able to reach its full operating capacity, these estimated levels of EMF comprise a worst-case EMF scenario.

**2.7-7** The first item in last column in table 2.7-2 of the Hazard Section, which discussed Hunter's Point Power Plant, has been revised:

Soil and groundwater were found to be contaminated with oil, asbestos, trichloroethylene, perchloroethylene, chromium, copper, lead, arsenie, zine, polychlorinated biphenyls (PCBs), diesel and gasoline, benzene, toluene, ethylbenzene, and xylene (BTEX), solvents, dichlorodiphenyltrichloroethane (DDT), pesticides, and acids. One area of the property has been cleaned up, with low levels of petroleum products remaining in the groundwater. Other areas are undergoing the DTSC process for remediation and closure. The site is listed in the Resource Conservation and Recovery Information System as it generates, transports, and stores hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). There are RCRA generator violations recorded in the EDR report (2004). There are aboveground storage tanks at the facility for diesel; leaks were reported in 1991 and 1998. There are no known pending violations as a result of the leaks.

**2.7-22** *The following sentence has been added to the second bulleted item:* 

Non-contaminated groundwater shall be released to the stormwater conveyance system (with prior approval). All handling and disposal of hazardous materials and wastes shall be done in compliance with applicable regulatory requirements including, but not limited to, those administered by U.S. EPA, BAAQMD, Department of Toxic Substances Control (DTSC), SF Bay Regional Water Quality Control Board, and Cal OSHA

**2.7-22** *In the Hazards section following paragraphs have been removed:* 

For the proposed single-circuit cable line, the calculated magnetic field strength varies from approximately 18.4 mG directly above the cables, diminishing to approximately 2.4 mG at 20 feet from the line (PG&E, 2004; Best Best and Kreiger, 2004). This distribution appears reasonable for an underground cable, with a high concentration of field strength directly above the cable since it is only a few feet from the ground surface, and with a rapid reduction of strength with distance due to the close spacing of the cables. This results in a greatly reduced width of exposure compared to an overhead line.

The underground cables would transition to above ground structures at the existing substations at each end of the project route. The field strength of the above ground conductors at the substation fence line has not been provided. In addition, the existing EMF levels induced by other utilities in the project vicinity are not known. For the proposed project, most of the underground duct bank would be within roadways. The exposure to the driving public therefore would vary from 18.4 mG to 2.4 mG or less depending on distance to the cable. On sidewalks, the pedestrian exposure typically would be 20 mG or less, as long as the cable is 20 feet from the edge of the sidewalk. However, where the cable is perpendicular to and beneath the sidewalk the local exposure to pedestrians may be as high as 170 mG.

**2.8-7** *In the Hydrology section, the last sentence in*  $3^{rd}$  *paragraph has been removed:* 

The SWPPP may include, but is not limited to, description of construction materials, practices, and equipment storage and maintenance, a list of pollutants likely to contact storm water, estimate of the construction site area and percent impervious area, site specific erosion and sedimentation control measures, list of provisions to eliminate or reduce discharge of materials to storm water, and BMPs for fuel and equipment storage. PG&E shall also incorporate into contract specifications the requirements that construction directly adjacent to or across waterways be limited to the dry season, annually from May 1st to November 15th, subject to agreement with the appropriate regulatory agencies. Construction during the dry season minimizes impacts of storm water runoff to the waterways' water quality. In the event of drought or an extended dry season in autumn, the construction permit may be extended at one week increments until the first rain event of over one inch total precipitation.

- **2.11-9** In the Noise section, the following mitigation measure has been moved from NO-2 and inserted as a mitigation measure for NOI-1.
  - Pavement breakers and jack hammerers shall be equipped with acoustically attenuated shields or shrouds recommended by the manufacturers.
- **2.11-9** *In the Noise section, the following mitigation measure NO-2 has been revised:* 
  - Vibratory drivers instead of conventional pile drivers shall be used where feasible and effective in reducing impact noise <u>and vibration</u> from shoring of jack-pit and thrust-block excavations in close proximity to sensitive receptors.
- **2.13-4** *In the Public Services section, the following mitigation measure has been revised:*

Mitigation Measure PS-2b: Park facilities, including the Bay Trail along Illinois Street between 22nd and 23rd Streets shall not be closed and/or restricted for a period of time exceeding two consecutive months weeks, unless there are extenuating circumstances.

**2.15-6** As indicated in Chapter II and in response to comment E1-1, changes have been made to the Traffic section; the last sentence on the page, which continues to page 2.15-7, has been revised:

Excavated materials and equipment storage yards would be temporarily stored at PG&E property located north of located near each of the switchyardsthe Potrero Switchyard, while equipment storage/staging areas would be located near each switchyard. Each of the following roadways are paralleled by the proposed project route and may experience lane closures during construction of the project:

# **2.15-10** *In the Traffic section, the* $3^{rd}$ *paragraph has been revised:*

Proposed hours of construction are 7:00 a.m. to 8:00 p.m., in areas where residential receptors exist within 100 feet of construction, or during times set by the City and County of San Francisco in the Excavation Permit and a Special Traffic Permit. Construction traffic would occur throughout the day, thus lessening the effect on peak-hour (commute) traffic (generally 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.). The project-generated trips would not be substantial relative to background traffic conditions (i.e., would fall within the daily fluctuations of traffic volumes) for these roadways. Therefore, this short-term increase in vehicle trips would not significantly affect level of service and traffic flow on roadways.

# **2.17-4** *In the Mandatory Findings of Significance, the* $3^{rd}$ *paragraph, has been revised:*

There are two planned transmission projects that can help alleviate San Francisco meet growth demand and capacity shortage issues. A planned upgrade to the San Mateo-Martin #4 60 kV to 115kV line, which currently serves San Francisco and was energized in July 2004, is scheduled for 2004 and is expected to bring as much as 100 megawatts (MW) of new capacity.

# **CHAPTER IV**

# MITIGATION MONITORING, COMPLIANCE AND REPORTING PLAN

## A. INTRODUCTION

This MND includes a proposed Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) for the mitigation measures proposed herein for PG&E's proposed Potrero to Hunters Point Cable Project (proposed project). The MMCRP table for the proposed project is provided at the end of this section. Section B herein provides the recommended framework for the implementation of the MMCRP by the CEQA Lead Agency, the CPUC, and describes the roles and responsibilities of government agencies in implementing and enforcing adopted mitigation measures.

# B. AUTHORITY FOR THE MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM

The California Public Utilities Code in numerous places confers authority upon the CPUC to regulate the terms of service and the safety, practices and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures stipulated as conditions of approval be implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the Public Resources Code. Section 21081.6 requires a public agency to adopt a Mitigation Monitoring, Compliance, and Reporting Program when it approves a project that is subject to preparation of an MND and where the MND for the project identifies significant adverse environmental effects. CEQA Guidelines Section 15097 was added in 1999 to further clarify agency requirements for mitigation monitoring or reporting.

The purpose of a MMCRP is to ensure that measures adopted to mitigate or avoid significant impacts of a project are implemented. The CPUC views the MMCRP as a working guide to facilitate not only the implementation of mitigation measures by the project proponent, but also the monitoring, compliance and reporting activities of the CPUC and any monitors it may designate.

The Commission will address its responsibility under Public Resources Code Section 21081.6 when it takes action on PG&E's application for a Certificate of Public Convenience and Necessity. If the Commission approves the application, it will also adopt a Mitigation Monitoring, Compliance, and Reporting Program that includes the mitigation measures ultimately made a condition of approval by the Commission.

# C. ROLES AND RESPONSIBILITIES

As the lead agency, the CPUC is required to monitor this project to ensure that the required mitigation measures and Applicant Proposed Measures are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of this monitoring program and has primary responsibility for implementation of the monitoring program. The purpose of the monitoring program is to document that the mitigation measures required by the CPUC are implemented and that mitigated environmental impacts are reduced to the level identified in the Program.

The CPUC may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as deemed necessary, and some monitoring responsibilities may be assumed by responsible agencies. The number of construction monitors assigned to the project will depend on the number of concurrent construction activities and their locations. The CPUC, however, will ensure that each person delegated any duties or responsibilities is qualified to monitor compliance.

The CPUC along with its environmental monitors will also ensure that any variance process or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements; no project variance will be approved by the CPUC if it creates new significant impacts. As defined in this Section, a variance should be strictly limited to minor project changes that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure. A proposed project change that has the potential for creating significant environmental effects will be evaluated to determine whether supplemental CEQA review is required. Any proposed deviation from the approved project, adopted mitigation measures, and Applicant Proposed Measures, and correction of such deviation, shall be reported immediately to the CPUC and the environmental monitor assigned to the construction spread for their review and approval. In some cases, a variance may also require approval by a CEQA responsible agency.

## D. ENFORCEMENT RESPONSIBILITY

The CPUC is responsible for enforcing the procedures adopted for monitoring through the environmental monitor assigned to each construction spread. The environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CPUC.

The CPUC has the authority to halt any construction, operation, or maintenance activity associated with the Potrero to Hunters Point Cable Project if the activity is determined to be a deviation from the approved project or adopted mitigation measures. The CPUC may assign this authority to the environmental monitor for each construction spread.

### MITIGATION COMPLIANCE RESPONSIBILITY

The Applicant, PG&E, is responsible for successfully implementing all the adopted mitigation measures in the MMCRP. The MMCRP contains criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely.

The Applicant shall inform the CPUC and its monitors in writing of any mitigation measures that are not or cannot be successfully implemented. The CPUC in coordination with its monitors will assess whether alternative mitigation is appropriate and specify to PG&E the subsequent actions required.

## **DISPUTE RESOLUTION**

It is expected that the Final MMCRP will reduce or eliminate many potential disputes. However, even with the best preparation, disputes may occur. In such event, the following procedure will be observed:

- **Step 1.** Disputes and complaints (including those of the public) should be directed first to the CPUC's designated Project Manager for resolution. The Project Manager will attempt to resolve the dispute.
- Step 2. Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the proposed project or adopted Mitigation Monitoring Program.
- Step 3. If a dispute or complaint regarding the implementation or evaluation of the Program or the mitigation measures cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.
- Step 4. If one or more of the affected parties is not satisfied with the decision as described in the Resolution, such party(ies) may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the Commission's Rules of Practice and Procedure for formal and expedited dispute resolution, although a good faith effort should first be made to use the foregoing procedure.

# E. GENERAL MONITORING PROCEDURES

### ENVIRONMENTAL MONITOR

Many of the monitoring procedures will be conducted during the construction phase of the project. The CPUC and the environmental monitor(s) are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with PG&E. To oversee the monitoring procedures and to ensure success, the environmental monitor assigned to each construction spread must be on site during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is required. The environmental monitor is responsible for ensuring that all procedures specified in the monitoring program are followed.

# F. GENERAL REPORTING PROCEDURES

Site visits and specified monitoring procedures performed by other individuals will be reported to the environmental monitor assigned to the relevant construction spread. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the environmental monitor. A checklist will be developed and maintained by the environmental monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The environmental monitor will note any problems that may occur and take appropriate action to rectify the problems.

## G. PUBLIC ACCESS TO RECORDS

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CPUC on request.

## H. MITIGATION MONITORING PROGRAM TABLE

The following Mitigation Monitoring, Compliance and Reporting table is presented to form the basis for implementation of the Mitigation Monitoring Program.

### **FORMAT**

The MMCRP is organized in a table format, keyed to each significant impact and each MND mitigation measure. Only mitigation measures adopted to address significant impacts are included in this program. Each mitigation measure is set out in full, followed by a tabular summary of monitoring requirements. The column headings in the tables are defined as follows:

Mitigation Measure: This column presents the mitigation measure identified in the MND.

- **Implementation Actions:** This column provides additional information on how the mitigation measures will be implemented.
- **Monitoring and Reporting Requirement:** This column contains an outline of the appropriate steps to verify compliance with the mitigation measure.
- **Monitoring Schedule:** The general schedule for conducting each monitoring and reporting task, identifying where appropriate both the timing and the frequency of the action.

## I. ENFORCEMENT

The MMCRP will be incorporated as a condition of project approval. Therefore, all mitigation measures for significant impacts must be carried out in order to fulfill the requirements of approval. A number of the mitigation measures will be implemented during the course of the development review process. These measures will be checked on plans, in reports, and in the field prior to construction. Most of the remaining mitigation measures will be implemented during the construction, or project implementation phase.

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
Aesthetics				
No significant impacts anticipated for aesthetics.				
Agricultural Resources				
No significant impacts anticipated for agricultural resources.				
Air Quality				
AQ-1: Construction and demolition activities associated with facility construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions.	AQ-1: The following measures proscribed by BAAQMD shall be implemented to ensure that construction impacts are less than significant.			
	All construction personnel working on the project shall be trained prior to starting construction on methods for minimizing air quality impacts during construction.	PG&E and/or its contractor(s) to implement measure as defined in coordination with BAAQMD to determine the most up-to-date best management practices for minimization of air quality impacts during construction	A. PG&E and/or its contractor(s) to submit a description of the training, including a list of the best management practices proposed for the project.  B. PG&E shall submit copies of sign-in sheets from the training session(s) to CPUC to verify compliance	A. Prior to and during all phases of construction      B. During all phases of construction
	Construction areas, unpaved access roads, and staging areas shall be watered at least twice daily during dry weather, or soil stabilizers shall be applied during active work.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	Trucks hauling soil and other loose material shall either be covered, have at least two feet of freeboard, or be sprayed with water prior to arriving and departing from the construction site.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction
	Paved access roads, parking areas, and staging areas at construction sites and streets shall be cleaned daily with water sweepers if excessive soil material is carried onto adjacent public streets.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction
	Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction
	Replant vegetation in disturbed areas as quickly as possible after project completion, taking into account optimal season and survival rates.	PG&E and/or its contractor(s) to coordinate a preconstruction "walk through" with the CPUC to agree where the revegetation will take place prior to disturbance. Photos should be submitted to CPUC immediately after vegetation has been replanted and again in 6 months to assure survival.	CPUC to participate in the walk through and review photographs to determine whether or not revegetation is acceptable. If not, CPUC shall review revegetation plan with PG&E and require additional revegetation activities to occur	Prior to construction, after disturbance, and 6 months after replanting to assure survival (taking into account optimal season and survival rates).
	Construction vehicles shall use paved roads to access the construction site wherever possible.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction
	Vehicle speeds shall be limited to 15 mph or less on unpaved roads and construction areas.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	A carpooling strategy shall be implemented for construction workers prior to commencing construction (during construction worker orientation and training). This strategy shall be submitted to and approved by the CPUC prior to commencement of project construction.	PG&E and/or its contractor(s) to prepare and submit a carpooling strategy to the CPUC	CPUC to review and approve submitted carpooling strategy; CPUC mitigation monitor to inspect compliance with carpooling strategy at least once weekly	One week prior to start of construction
	Construction vehicles shall be properly tuned per the manufacturers' recommended maintenance schedule, if reasonably available. This applies to vehicles used for construction activities only, and does not apply to commuter vehicles.	If PG&E and/or its contractor(s) does not have the manufacturers' recommended maintenance schedule for a construction vehicle, PG&E must use reasonable effort to assure construction vehicle is properly maintained. A proposed schedule of construction vehicle maintenance shall be submitted to the CPUC for approval.	CPUC to review and approve submitted maintenance plan, which is to include implementation method (i.e. manufacturer's recommended maintenance, PG&E managed maintenance, etc.) and schedule.	One week prior and during construction if equipment type changes.
	Vehicle idling time shall be minimized to 10 minutes whenever possible.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction
	Install sandbags or other erosion control measures to prevent silt runoff to public roadways.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction
	Suspend excavation and grading activity when dust control mitigation measures become ineffective due to excessive winds.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During times of construction affected by excessive winds

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	Designate at least one person to monitor the dust control program and order increased watering, as necessary, to prevent transport of dust offsite. The name and telephone number of such persons shall be provided to the BAAQMD prior to the start of construction.	PG&E and/or its contractor(s) to implement measure as defined	PG&E to submit name and telephone number of monitor(s) to BAAQMD and the CPUC	One week prior to start / during construction (if information changes)
AQ-2: Project construction could result in the release of toxic air contaminant (TAC) emissions during disturbance of contaminated soils and/or serpentine rocks.	AQ-2: In addition to implementation of Mitigation Measure AQ-1, the following measures prescribed by BAAQMD shall be implemented to ensure that TAC emissions from construction activities would be less than significant			
	Notification to BAAQMD of construction activities, such as grading operations, when the activity occurs in areas where ultramafic and serpentine rock or naturally-occurring asbestos may be found, shall be required.	PG&E and/or its contractor(s) to implement measure as defined	PG&E to submit report to BAAQMD and the CPUC defining the geological setting of the area and the type of construction activity to occur	Two weeks prior to construction for known areas; during construction for unknown areas

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	Ensure that construction operations do not result in visible emissions crossing the project boundaries in areas where hazardous waste or serpentine rocks exist.	A. PG&E and/or its contractor(s) to assure no visible emissions cross the property line. This will be assured by implementation of Mitigation Measure HAZ-1b, which requires excavated material with known hazards to be placed on plastic sheeting, moistened to control dust, and covered in a manner to prevent runoff of turbid or contaminated stormwater. This Measure also required soil sampling and analysis for specific inorganic and organic chemicals per the Maher's Ordinance.	A. CPUC mitigation monitor to inspect compliance at least once weekly	A. Prior to and during construction in areas containing known hazardous waste (including asbestos containing material) and/or serpentine rocks.
		B. PG&E and/or its contractor(s) to stop construction and determine best mitigation method to assure no visible emissions cross project boundary upon discovery of new hazardous waste (including asbestoscontaining material) and/or serpentine rocks.	B. PG&E to provide written and verbal notification to the CPUC of any discoveries of previously unknown areas containing hazardous waste (including asbestos containing material) and/or serpentine rocks	B. Immediately following discovery of unknown areas containing hazardous waste (including asbestos containing material) and/or serpentine rocks.

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	<ul> <li>Construction projects that will disturb more than one acre of asbestos containing material, as defined in accordance with California Code of Regulations Title 17, Section 93000, shall prepare and obtain BAAQMD approval for an asbestos dust mitigation plan. The plan shall specify how the operation will minimize emissions and must address specific emission sources.</li> <li>Construction projects that will disturb less than one acre of asbestos containing material, as defined in accordance with California Code of Regulations Title 17, Section 93000, shall comply with applicable BAAQMD regulations.</li> </ul>	For projects disturbing more than one acre of asbestos containing material, PG&E and/or its contractor(s) to prepare an asbestos dust mitigation plan and submit to the CPUC. For projects disturbing less than one acre, PG&E shall comply with applicable BAAQMD regulations.	For projects disturbing more than one acre of asbestos-containing material, PG&E and/or its contractor(s) to attain approval of asbestos dust mitigation plan from BAAQMD and submit final approval to the CPUC	One month prior to and during construction
	Removal of any asbestos containing materials shall be performed by a CAL-OSHA certified, licensed asbestos abatement contractor in accordance with California Code of Regulations, Title 8, Section 1529	PG&E and/or its contractor(s) to contract, on an on-call basis, a CAL-OSHA-certified, licensed asbestos abatement contractor for removal of any asbestoscontaining materials	A. PG&E and/or its contractor(s) to submit the contact information of the CAL-OSHA certified, licensed asbestos abatement contractor to the CPUC.  B. If material containing asbestos is removed, PG&E and/or its contractor(s) must submit written documentation of removal including the date of removal, and quantity removed. CPUC	A. One week prior to construction  B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	If structures are disturbed containing asbestos and the material becomes friable, removal of friable materials with a concentration of one	PG&E and/or its contractor(s) to contract, on an on-call basis, a CAL-OSHA-certified, licensed asbestos abatement contractor for removal of any asbestos-	A. PG&E and/or its contractor(s) to submit the contact information of the CAL-OSHA certified, licensed asbestos abatement contractor to the CPUC.	A. Prior to and during all phases of construction
	percent or greater and at a quantity of 160 square feet or 260 linear feet or greater shall require notification to the Regional EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) office and BAAQMD.	containing materials	B. If material containing asbestos is removed, PG&E and/or its contractor(s) must submit written documentation of removal including the date of removal, and quantity removed to the CPUC	B. During all phases of construction
			C. If removal of friable material with a concentration of one percent or greater and at a quantity of 160 square feet or 260 linear feet or greater is necessary, PG&E and/or its contractor(s) must notify the Regional EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) office, BAAQMD, and the CPUC	C. During all phases of construction
	All handling and disposal of hazardous materials and wastes shall be done in compliance with applicable regulatory requirements including, but not limited to, those administered by U.S. EPA, BAAQMD, Department of Toxic Substances Control (DTSC), SF Bay Regional Water Quality Control Board, and Cal OSHA	PG&E and/or its contractor(s) to contract with a certified contractor/ solid water facility for all the handling and disposal of all toxic materials.	PG&E and/or its contractor(s) to submit the name of the certified solid waste facility to be used to the CPUC.	One week prior to start of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	Additionally, Mitigation Measure LUP-1, provided in Section 2.9 <i>Land Use</i> , shall be implemented to minimize impacts to sensitive receptors.	See LUP-1	See LUP-1	See LUP-1
Biological Resources				
No significant impacts anticipated for biological resources.				

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
Cultural Resources				
CR-1: Project construction could result in the disturbance of unknown buried prehistoric cultural resources and/or potential historic contents in artificial fill material along the project route.	CR-1a: Pursuant to CEQA Guidelines 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" shall be instituted. The Applicant's mitigation monitor shall be on-site during all ground disturbing activities to watch for potential discoveries. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and PG&E shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of PG&E and the qualified archaeologist shall meet to determine the appropriate course of action. All significant cultural resource materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E to submit contact information and qualification of trained archeological or paleontological expert to CPUC for approval.  B. PG&E and/or its contractor(s) to provide immediate verbal notification to the archeological or paleontological expert and the CPUC of any discovered cultural resources.  C. CPUC mitigation monitor to inspect compliance at least once weekly	A. Prior to start of construction  B. Immediately upon discovery  C. During all phases of construction requiring trenching activities

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	CR-1b: PG&E shall notify a qualified paleontologist of any unanticipated discoveries made by either the cultural resources monitor or construction personnel and subsequently document the discovery as needed. In the event of an unanticipated discovery of a breas, or seeps of natural petroleum that trapped extinct animals and preserved and fossilized their remains, and/or trace fossil during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is	PG&E and/or its contractor(s) to implement measure as defined; noting CR-1a requiring work that within 50 feet of the discovered resource must stop.	A. PG&E to submit contact information and qualifications of the paleontologist to be notified of any unanticipated discoveries during construction  B. PG&E and/or its contractor(s) to provide immediate verbal notification to the paleontologist and the CPUC of any discovered cultural resources; with follow up written documentation noting date of discovery, type of discovery and actions taken to protect the resource(s).  C. CPUC mitigation monitor to monitor compliance	A. Prior to start of construction  B. Immediately upon discovery  C. During all phases of construction
	allowed to resume at the location of the find.			
	CR-1c: Prior to the initiation of construction or ground-disturbance, all construction personnel shall be trained on the potential for exposing subsurface cultural resources. The training shall provide information on the procedures to be followed upon the discovery or suspected discovery of archaeological	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E and/or its contractor(s) to submit a description of the training including a list of the best management practices proposed for the project.  B. PG&E shall submit copies of sign-in sheets from the training session(s) to CPUC to verify compliance	A. Prior to and during all phases of construction  B. During all phases of construction
	materials, including Native American remains.			

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	CR-1d: Upon discovery of possible buried cultural materials (including potential Native American skeletal remains), work in the immediate area of the find shall be halted and the monitor shall be notified. Once the find has been identified and evaluated, a qualified archaeologist shall make the necessary plans for treatment of the find and mitigation of impacts if the find is determined to be significant as defined by the California Environmental Quality Act. PG&E will comply with all State laws in the event of the exposure of Native American skeletal remains.	PG&E and/or its contractor(s) to implement measure as defined; noting CR-1a requiring work that within 50 feet of the discovered resource must stop.	A. PG&E and/or its contractor(s) to provide immediate verbal notification to the CPUC of any discovered cultural resources; with follow up written documentation noting date of discovery, type of discovery and actions taken to protect the resource(s).  B. CPUC mitigation monitor to monitor compliance	A. Immediately upon discovery  B. During all phases of construction
CR-2: Project construction could result in the discovery and disturbance of unknown human remains.	CR-2: In the event of the discovery of human remains, measures shall be followed pursuant to CEQA Guidelines 15064.5 (e) (1).	PG&E and/or its contractor(s) to implement measure as defined; noting CR-1a requiring work that within 50 feet of the discovered resource must stop.	A. PG&E and/or its contractor(s) to provide immediate verbal notification to the City of San Francisco Coroner and the CPUC of any discovered human remains; with follow up written documentation noting date of discovery, type of discovery and actions taken to protect the resource(s).  B. CPUC mitigation monitor to monitor compliance	A. Immediately upon discovery  B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	(1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:  (A) The City of San Francisco Coroner shall be contacted to determine that no investigation of the cause of death is required, and  (B) If the Coroner determines the remains to be Native American:	Continuation of CR-2		

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	The Coroner shall contact the Native American Heritage Commission within 24 hours.	Continuation of CR-2		
	2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.			
	3. The most likely descendent may make recommenda tions to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.			

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
Geology, Soils, and Seismicity				
GEO-1: Structural damage could occur over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.	GEO-1: A site-specific, design level geotechnical investigation shall be performed to assess the extent and consequence of the expansive soils. The sub grade shall be prepared and foundations constructed as recommended in the investigation to limit the impact due to expansive soils to less than significant. Recommendations and conclusions determined by a registered geotechnical engineer or qualified civil engineer shall be incorporated in the final design as part of the project. The design measures selected to mitigate expansive soil hazards shall be submitted to and approved by PG&E and the CPUC.	PG&E and/or its contractor(s) to implement measure as defined	PG&E and/or its contractor(s) to submit geotechnical investigation and selected measures to the CPUC for review and approval	Submit to CPUC two weeks prior to start of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
GEO-2: The proposed project could result in increased erosion, especially in areas that are underlain by Bay Mud and other fine-grained material and also where the soil would be exposed during construction.	GEO-2: During construction and grading, erosion and sediment control measures shall be conducted in accordance with best management practices for the reduction of pollutants in runoff (refer to Section 2.8, Hydrology and Water Quality). The components of the proposed project would be subject to NPDES requirements and would require the acquisition of a NPDES general construction permit. Erosion of soil materials to local waterways and its affects on water quality are further discussed in Section 2.8, Hydrology and Water Quality. Best management practices for sediment and dust control shall be implemented to limit the impact due to erosion to a less than significant level. Best management erosion control measures shall also be implemented in unpaved areas, including the property between Cesar Chavez and Marin Streets.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E and/or its contractor(s) to acquire NPDES general construction permit. PG&E to submit NPDES general construction permit to the CPUC  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Submit to final permit to CPUC two weeks prior to start of construction  B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
GEO-3: The proposed project could be adversely affected by differential settlement, fault rupture, liquefaction, and seismic-related ground failure.	GEO-3: A site-specific, design level geotechnical investigation, shall be performed to assess the potential for liquefaction and seismic-related ground failure in susceptible areas along the selected project route. The duct bank and vaults shall be designed to accommodate or mitigate the effects of ground settlement and loss of foundation bearing strength in the event of an earthquake. A geotechnical assessment of the rail crossings at Third and 23rd Streets, Third and Evans Avenue, and Evans Avenue and Quint Street, shall be performed to ensure that the boring alignment and bore casing design appropriately address and minimize the impact of liquefaction. Recommendations and conclusions determined by a registered geotechnical engineer or qualified civil engineer shall be incorporated in the final design as part of the project. PG&E shall submit the design measures selected to mitigate liquefaction to the CPUC for review and approval.	PG&E and/or its contractor(s) to implement measure as defined	Submit geotechnical investigation and selected design measures to the CPUC for review and approval	Submit to CPUC two weeks prior to start of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
<b>GEO-4:</b> The proposed project is in an area underlain by artificial fill, which could be susceptible to earthquake-induced settlement.	GEO-4: A site-specific, design level geotechnical investigation shall be performed to assess the extent and consequence of ground instability. The duct bank, vaults, and substation structures shall be designed to accommodate or mitigate the effects of ground settlement and loss of foundation bearing strength in the event of an earthquake. Recommendations and conclusions determined by a registered geotechnical engineer or qualified civil engineer shall be incorporated in the final design as part of the project. PG&E shall submit the design measures selected to mitigate ground instability hazards to the CPUC for review and approval.	PG&E and/or its contractor(s) to implement measure as defined	Submit geotechnical investigation and selected design measures to the CPUC for review and approval	Submit to CPUC two weeks prior to start of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
GEO-5: The proposed project could be susceptible to ground shaking effects in the event of an earthquake.	GEO-5a: Switchyard components, new substation equipment, structures and foundations shall be procured and designed in accordance with PG&E's engineering practices, which include the application of seismic design provisions (e.g., the Institute of Electrical and Electronic Engineers (IEEE) 693 for selected critical equipment, the current edition of the California Building Code (CBC), and various industry standards) intended to mitigate earthquake damage to substation equipment and structures. The design criteria selected to mitigate ground shaking hazards shall be submitted to and approved by PG&E and the CPUC.	PG&E and/or its contractor(s) to implement measure as defined	PG&E and/or its contractor(s) to submit design criteria to the CPUC for approval	Submit to CPUC two weeks prior to start of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
Hazards and Hazardous Materials				
HAZ-1: Construction excavation could encounter contaminated materials, causing an increase in risk of exposure of hazardous materials to humans and the environment. In addition, construction activities requiring the use of hazardous materials may increase the risk of exposure to hazardous materials.	HAZ-1a: PG&E shall ensure, through the enforcement of contractual obligations, that all contractors transport, store, and handle construction-related hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the U.S. Department of Transportation, RWQCB, San Francisco Department of Public Health, and the local fire department. PG&E shall also ensure that all contractors control the source of any leak and immediately contain any spill utilizing appropriate spill containment and countermeasures. If required by any regulatory agency, contaminated media shall be collected and disposed of at an off-site facility approved to accept such media. In addition, all precautions required by the RWQCB-issued National Pollution Discharge Elimination System (NPDES) construction activity storm water permits shall be taken to ensure that no hazardous materials enter any storm drains or nearby waterways.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E and/or its contractor(s) to acquire NPDES general construction permit and subsequently submit permit to the CPUC.  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Submit to final permit to CPUC two weeks prior to start of construction  B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	implement all development requirements within the area regulated under San Francisco's Maher Ordinance, which include soil sampling and analysis for specific inorganic and organic chemicals. PG&E shall also implement its specific protocol for subsurface soil sampling and testing for contaminated soils during construction activities. In addition to the requirements of the Maher Ordinance and PG&E's protocols, the following mitigation measures shall be implemented to ensure that impacts regarding the potential to expose the public, workers, and the environment to contaminated soil, surface, and/or groundwater along the proposed route would remain less than significant.	PG&E and/or its contractor(s) to implement measure as defined	A. CPUC mitigation monitor to inspect compliance at least once weekly  B. CPUC to submit documentation, including but not limited to, laboratory test results to verify compliance with all development requirements within the area regulated under the Maher Ordinance	A. During all phases of construction  B. Within one month of completion of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	• Hazardous Substance Control and Emergency Response Plan  - PG&E shall prepare a Hazardous Substance Control and Emergency Response Plan (the Plan) for the project and implement it during project construction. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. In addition, the Plan shall include proposed methodologies for tracking and managing excavation materials, including asphalt, concrete, debris, and soil. Details on dust control, runoff control, tarping, and air monitoring (of the trench and temporary excavated materials storage areas) shall be included in the Plan to the Hazardous Material Unified Program Agency, or another appropriate oversight agency, for review and approval prior to initiating any project-related excavation activities.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E to submit the Plan to the Hazardous Material Unified Program Agency and the CPUC for review and approval.  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Submit to final plan to CPUC two weeks prior to start of construction  B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	• Health and Safety Plan – PG&E shall prepare and implement a Health and Safety Plan to ensure the health and safety of construction workers and the public during project construction. The Plan shall include information on the appropriate personal protective equipment to be used during excavation activities and material loading, testing, and disposal.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E to submit the Plan to the CPUC for review and approval.      B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Submit to final plan to CPUC two weeks prior to start of construction  B. During all phases of construction
	Stormwater Pollution     Prevention Plan – PG&E shall     prepare a Stormwater     Pollution Prevention Plan     (SWPPP) for the proposed     project to be implemented     during construction. The     SWPPP shall contain     information on engineering     controls to minimize turbid     stormwater runoff or the     acceleration of sedimentation     rates.	PG&E and/or its contractor(s) develop a SWPPP	A. PG&E and/or its contractor(s) to obtain necessary permit from the RWQCB  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Submit to final permit to CPUC two weeks prior to start of construction  B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	• Environmental Training Program – PG&E shall ensure that an environmental training program is established and implemented to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention and shall include a review of the Health and Safety Plan, Hazardous Substance Control and Emergency Response Plan, and the SWPPP.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E and/or its contractor(s) to submit a description of the training.  B. PG&E shall submit copies of sign-in sheets from the training session(s) to CPUC to verify compliance	A. Two weeks prior to construction  B. During all phases of construction
	Emergency Spill Supplies and Equipment – PG&E shall ensure that oil-absorbent material, tarps, and storage drums are used to contain and control any minor releases.  Emergency spill supplies and equipment shall be kept adjacent to all areas of work and in staging areas and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting released hazardous materials shall be provided in the proposed project's Hazardous Substance Control and Emergency Response Plan, which shall be implemented during construction.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E shall submit the Plan to the City of San Francisco Hazardous Material Unified Program Agency and the CPUC for review and approval. B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Submit to final plan to CPUC two weeks prior to start of construction  B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	• Environmental Field Monitoring – PG&E shall ensure that a trained environmental monitor be present during all proposed project excavation activities. The monitor shall be equipped with the appropriate equipment to monitor air quality in excavation trenches and to observe excavation spoils for the presence of potentially hazardous materials. PG&E shall ensure that the monitor has the experience and authority to select the appropriate personal protective equipment, determine appropriate soil and groundwater handling and disposal requirements, modify work activities, or stop work at any time to ensure worker and public health and safety. The environmental monitor shall be approved by the CPUC prior to the start of construction activities.	PG&E and/or its contractor(s) to contract with a trained environmental monitor required to be present during all excavation activities	PG&E to submit contact information and qualification of trained environmental monitor to CPUC for approval.	One week prior to start of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	• Storage, Testing, and Disposal of Excavated Materials and Groundwater – PG&E shall ensure that excavated materials are handled, stored and disposed in accordance to applicable regulations. If excavated materials are temporarily stored, they shall be placed on plastic sheeting, moistened to control dust, and covered in a manner to prevent runoff of turbid or contaminated stormwater. Analyses to determine the presence of hazardous materials in material to be disposed of shall be performed by EPA certified laboratories to comply with the requirements of the receiving landfill. PG&E shall ensure that all contaminated soils are disposed of at either a Class I or Class II landfill, depending on the extent of hazardous materials contamination in the soils. Laboratory test reports shall be used to determine the proper handling, transport, and disposal methods.	PG&E and/or its contractor(s) to implement measure as defined, contract with an EPA certified laboratory to provide laboratory testing to determine the presence of hazardous materials in material to be disposed of to comply with the requirements of the receiving landfill (either Class I or Class II).	A. PG&E to submit a report to the CPUC containing the following information: contact information of the EPA certified laboratory(ies) to be used, laboratory test reports, date of material removal, quantity of material removed, and landfill used for disposal of materials.  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Submit contact information prior to start of construction; report within three weeks after completion of construction  B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	If groundwater is encountered in the excavation trenches, it shall be contained in Baker tanks and tested for turbidity and potential contaminants prior to being disposed of in accordance with local regulations. Noncontaminated groundwater shall be released to the stormwater conveyance system (with prior approval).	PG&E and/or its contractor(s) to implement measure as defined	PG&E and/or its contractor(s) to attain necessary NPDES from the RWQCB and necessary permits from the City of San Francisco	Submit to final permit to CPUC two weeks prior to start of construction
	Additionally, Mitigation Measure LUP-1, provided in Section 2.9 <i>Land Use</i> , shall be implemented to minimize impacts to sensitive receptors.	See LUP-1	See LUP-1	See LUP-1
Hydrology and Water Quality				
HYD-1: The proposed project could result in adverse impacts to groundwater quality.	HYD-1: After installation of the duct bank, it shall be surrounded by approved¹ native backfill or with concrete. If concrete is used, the trench shall be filled with fluidized thermal backfill, a blend of sand, gravel, fly ash, and cement above the duct bank. If the permeability of the fluidized thermal backfill is not enough to allow groundwater to pass through it, a section of drainpipe shall be laid across the trench directly above the concrete at approximately 100-foot intervals. Alternatively, gravel drains or other drainage measures may be installed across the cable line.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction

Backfill will be tested per Mitigation Measure HAZ-1b to determine if hazards exist, and to assure the material is classified as potential backfill. If the material complies with all standards and is classified as potential backfill it is considered approved for use as such.

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
Land Use, Plans, and Policies				
<b>LUP-1:</b> Project construction could result in adverse impacts, associated with traffic congestion and noise, to adjacent residential land uses along Minnesota Street between 25th and 26th Streets.	LUP-1: PG&E shall move the segment of the proposed project route from 25th Street between Tennessee and Minnesota Streets and Minnesota Street between 25th and Cesar Chavez Streets to instead continue down Tennessee Street from 25th Street to Cesar Chavez Streets and then travel east along Cesar Chavez Street.	PG&E and/or its contractor(s) to implement measure as defined	PG&E to submit revised plans showing new project alignment to CPUC for review and approval	Submit to final plan to CPUC two weeks prior to start of construction
Mineral Resources				
No significant impacts anticipated for mineral resources.				
Noise				
NOI-1: Construction activities would intermittently and temporarily generate noise levels above existing ambient levels in the project vicinity.	<b>NOI-1:</b> PG&E shall ensure that the following construction noise mitigation measures are implemented.			
	Intake and exhaust mufflers recommended by the manufacturers will be installed on impact tools and equipment.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to periodically inspect equipment	Prior to and during construction
	All equipment used on the project shall be muffled and maintained in good operating condition. All internal combustion engine-driven equipment shall be fitted with intake and exhaust mufflers which are in good condition.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect equipment	Prior to start of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	Construction contractors shall locate fixed construction equipment such as compressors as far as possible from noise-sensitive receptors during construction.	PG&E and/or its contractor(s) to implement measure as defined	CPUC mitigation monitor to inspect compliance at least once weekly	During all phases of construction
	Construction hours shall be limited to between the hours of 7:00 a.m. and 8:00 p.m. in areas where residential receptors exist within 100 feet of construction or in accordance with the specific requirements of the excavation permit issued by the City of San Francisco.	PG&E and/or its contractor(s) shall setup a phone noise complaint line and notify, in writing, residents within 300 feet of the project site, who to contact should any observed noise violations occur	A. PG&E to notify the CPUC if/when complaints are received within 24 hours of receipt of noise complaint  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Prior to start of construction and during all phases of construction for complaints received  B. During all phases of construction where residential receptors exist within 100 feet of construction
	Pavement breakers and jack hammerers shall be equipped with acoustically attenuated shields or shrouds recommended by the manufacturers.	PG&E and/or its contractor(s) to implement measure as defined	A. CPUC mitigation monitor to inspect equipment  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Prior to start of construction  B. During all phases of construction
	Additionally, Mitigation Measure LUP-1, provided in Section 2.9 <i>Land Use</i> , shall be implemented to minimize impacts to sensitive receptors.	See LUP-1	See LUP-1	See LUP-1
NOI-2 Project construction could result in adverse impacts to nearby receptors due to excessive construction vibration.	NOI-2 PG&E shall ensure that the following construction vibration mitigation measures are implemented.			

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	Vibratory drivers instead of conventional pile drivers shall be used where feasible and effective in reducing vibration and noise impacts from shoring of jack-pit and thrust- block excavations in close proximity to sensitive receptors.	PG&E and/or its contractor(s) to implement measure as defined	A. CPUC mitigation monitor to inspect equipment  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Prior to start of construction     B. During all phases of construction
	Additionally, Mitigation Measure LUP-1, provided in Section 2.9 <i>Land Use</i> , shall be implemented to minimize impacts to sensitive receptors.	See LUP-1	See LUP-1	See LUP-1
Population and Housing				
PH-1: Construction activities would result in the temporary displacement of the homeless population that currently resides along the proposed project route.	PH-1: PG&E shall contact and coordinate with the Mayor's Office on Homelessness to inform the resident population on the project roadways about displacement due to construction.	PG&E and/or its contractor(s) to implement measure as defined	PG&E to submit written summary of discussion with Mayor's Office on Homelessness to the CPUC	Prior to start of construction
Public Services				
PS-1: The proposed facilities could be subject to vandalism and/or terrorism.	PS-1: All manhole covers installed as part of the proposed project shall be consistent with PG&E standard manhole covers. Each manhole cover shall weigh at least 350 pounds or the covers shall be bolted to the manhole frame at four locations using a stainless steel pent-head bolt whenever the manhole is not in use.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E to submit plans showing locations of manholes.  B. CPUC mitigation monitor to inspect compliance	A. Submit final plans to CPUC two weeks prior to start of construction  B. After construction has been completed

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
PS-2: Project construction activities would result in the temporary closure and/or restriction of some parks, including the Bay Trail.	PS-2a: PG&E shall coordinate with the City and County of San Francisco Park and Recreation Department and the Association of Bay Area Governments' Bay Trail staff prior to closure and/or restriction of park and recreation facilities.	PG&E and/or its contractor(s) to implement measure as defined	PG&E to submit written summary of discussion with City and County of San Francisco Park and Recreation Department and the Association of Bay Area Governments' Bay Trail staff to the CPUC	Prior to start of construction
	PS-2b: Park facilities, including the Bay Trail along Illinois Street between 22nd and 23rd Streets shall not be closed and/or restricted for a period of time exceeding two consecutive weeks unless there are extenuating circumstances.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E to submit a construction schedule identifying estimated periods of closure of the identified Bay Trail segment B. CPUC mitigation monitor to inspect compliance	A. Prior to start of construction     B. During all phases of construction
Recreation				
No significant impacts anticipated for recreation.				
Transportation / Traffic				
TRA-1: Project construction within existing streets would reduce the number of, or the available width of, travel lanes on roads, resulting in temporary disruption of traffic flows and increases in traffic congestion.	TRA-1a: PG&E shall obtain and comply with local and state road encroachment permits, and railroad encroachment permits.	PG&E and/or its contractor(s) to implement measure as defined	PG&E and/or its contractor(s) to attain, comply with, and submit acquired permits to the CPUC	Attain and submit permits to the CPUC two weeks prior to start of construction  Comply with permits during all phases of construction
	<b>TRA-1b:</b> PG&E shall implement the following transportation/traffic measures.			

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ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	PG&E shall prepare and implement a Traffic     Management Plan. PG&E shall submit the Plan to the City and County of San Francisco for review and approval prior to construction. The plan shall:	PG&E and/or its contractor(s) to implement measure as defined	A. CPUC to review and approve submitted Traffic Management Plan  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Submit to final plan to CPUC two weeks prior to start of construction  B. During all phases of construction
	<ul> <li>include a discussion of work hours, haul routes, limits on the lengths of open trench, work area delineation, traffic control and flagging;</li> <li>identify all access and parking restrictions and signage requirements;</li> </ul>			

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	- layout a plan for notifications and a process for communicating with affected residents and businesses prior to the start of construction. Advance public notification would include postings of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which lanes and access points/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints;	Continuation of TRA-1b		
	<ul> <li>include a plan to coordinate all construction activities with emergency service providers in the area at least one month in advance.</li> <li>Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable to emergency service vehicles at all times;</li> </ul>			

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	<ul> <li>include the requirement that all open trenches be covered with metal plates at the end of each workday to accommodate traffic and access;</li> </ul>	Continuation of TRA-1b		
	<ul> <li>specify the street restoration requirements pursuant to PG&amp;E's franchise agreements with the City and County of San Francisco;</li> </ul>			
	- discuss temporary pedestrian, wheelchair, and bicycle access through detours or safe areas along the construction zone, where construction shall result in the temporary closure of sidewalks or bike lanes. These areas shall be delineated and signed.			
	PG&E shall identify all roadway locations where special construction techniques (e.g., horizontal boring, directional drilling or night construction) would be used to minimize impacts to traffic flow.	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E and/or its contractor(s) to submit report identifying information required in the mitigation measure to the CPUC to review and approve.  B. CPUC mitigation monitor to inspect compliance at least once weekly	A. Submit to CPUC two weeks prior to start of construction      B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	PG&E shall develop circulation and detour plans to minimize impacts to local street circulation. This may	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E and/or its contractor(s) to submit circulation and detour plans to the CPUC to review and approve.	A. Submit to final plans to CPUC two weeks prior to start of construction
	include the use of signing and flagging to guide vehicles through and/or around the construction zone.		B. CPUC mitigation monitor to inspect compliance at least once weekly	B. During all phases of construction
	PG&E shall consult with San Francisco Muni at least one month prior to construction to coordinate bus stop relocations (as necessary)	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E and/or its contractor(s) to submit plans to reduce potential interruption of transit service to the CPUC to review and approve.	A. Submit to final plans to CPUC two weeks prior to start of construction
	and to reduce potential interruption of transit service.		B. CPUC mitigation monitor to inspect compliance at least once weekly	B. During all phases of construction
	PG&E shall coordinate with the City and County of San Francisco, San Francisco Muni, the Port of San Francisco, and any other appropriate entity, regarding	PG&E and/or its contractor(s) to implement measure as defined	A. PG&E and/or its contractor(s) to submit plans to minimize the cumulative effect of simultaneous construction activities in overlapping areas to the CPUC to review and approve.	A. Submit to final plan to CPUC two weeks prior to start of construction
	measures to minimize the cumulative effect of simultaneous construction activities in overlapping areas.		B. CPUC mitigation monitor to inspect compliance at least once weekly	B. During all phases of construction

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
	• If excavation is scheduled to occur while the moratorium is in effect on Cesar Chavez Street (until January 1, 2005) and on 23rd Street (until June 2, 2005), PG&E shall repave and restripe the entire street from curb to curb (not just the area that was	A. PG&E and/or its contractor(s) shall coordinate with the City of San Francisco's Director of Public Works to attain the necessary waiver under Section 2.4.21 of the San Francisco Department of Public Works Code to construct while a moratorium is in effect.	A. PG&E and/or its contractor(s) to submit waiver to construct during moratorium to the CPUC	A. Prior to start of construction on streets affected by moratorium
	trenched).	B. PG&E and/or its contractor(s) shall repave and restripe the entire street from curb to curb	B. PG&E to submit plans to repave and restripe the entire street from curb to curb to the CPUC	B. Two weeks prior to construction on streets affected by moratorium
			C. CPUC mitigation monitor to inspect compliance	C. After measure has been completed
TRA-2: Project construction would result in short-term increases in vehicle trips by construction vehicular activities and construction workers.	TRA-2: Implement Mitigation Measures TRA-1 and TRA-1b.	See TRA-a and TRA-1b	See TRA-a and TRA-1b	See TRA-a and TRA-1b
TRA-3: Project construction within roadways and railroad rights-of-way would temporarily increase the potential for accidents.	TRA-3: Implement Mitigation Measures TRA-1 and TRA-1b.	See TRA-a and TRA-1b	See TRA-a and TRA-1b	See TRA-a and TRA-1b
TRA-4: Project construction within or across streets would affect emergency access, and access to local land uses.	TRA-4: Implement Mitigation Measures TRA-1 and TRA-1b.	See TRA-a and TRA-1b	See TRA-a and TRA-1b	See TRA-a and TRA-1b
<b>TRA-5:</b> Project construction could temporarily disrupt bus service along the proposed project route.	TRA-5: Implement Mitigation Measures TRA-1 and TRA-1b.	See TRA-a and TRA-1b	See TRA-a and TRA-1b	See TRA-a and TRA-1b

ENVIRONMENTAL IMPACT	MITIGATION MEASURE / APPLICANT-PROPOSED MEASURE	IMPLEMENTING ACTIONS	MONITORING/REPORTING REQUIREMENT	MONITORING SCHEDULE
Utilities and Services				
No significant impacts anticipated for utilities and services.				